Royal Netherlands Army

Combined Endeavor 2004

LTC Ed van Seters

command & control

C2SC

support centre

Location Ede

command & control C2SC support centre

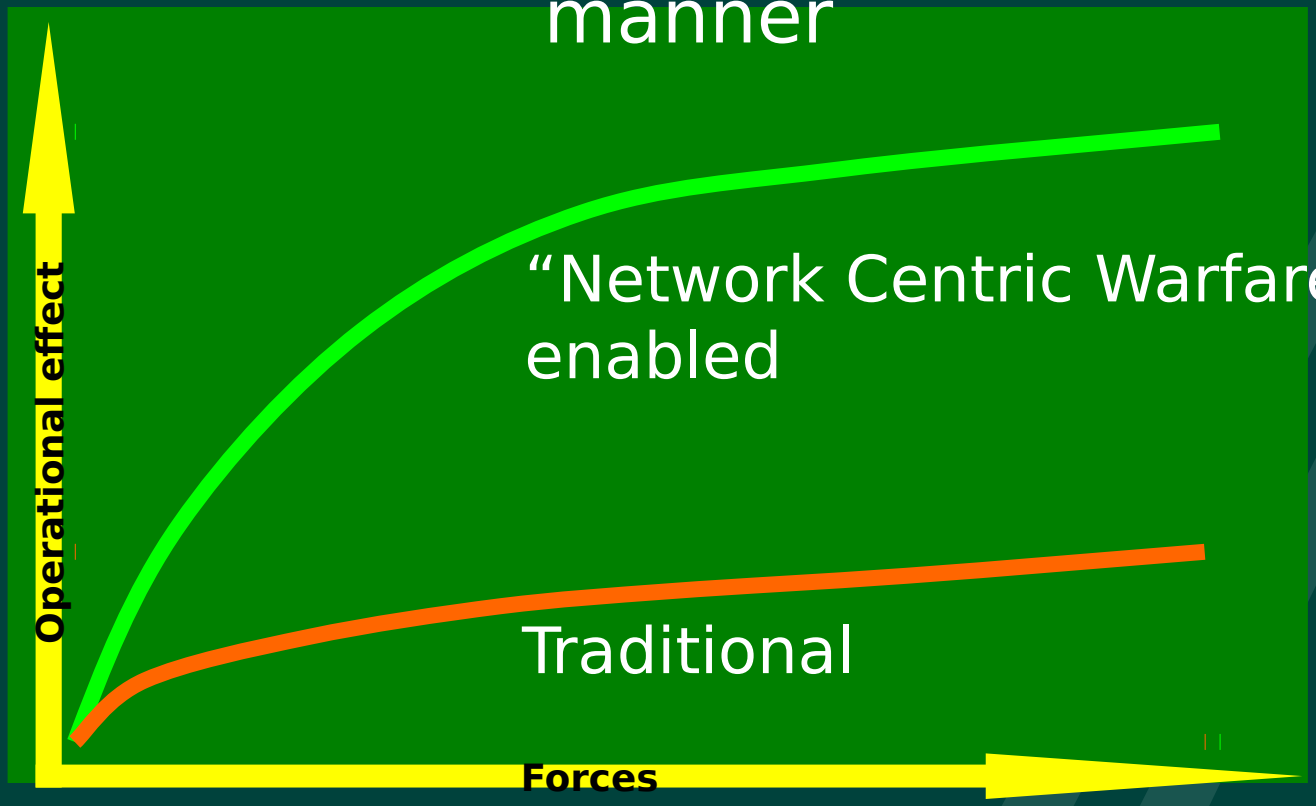
School of Signals

C2 Support Centre

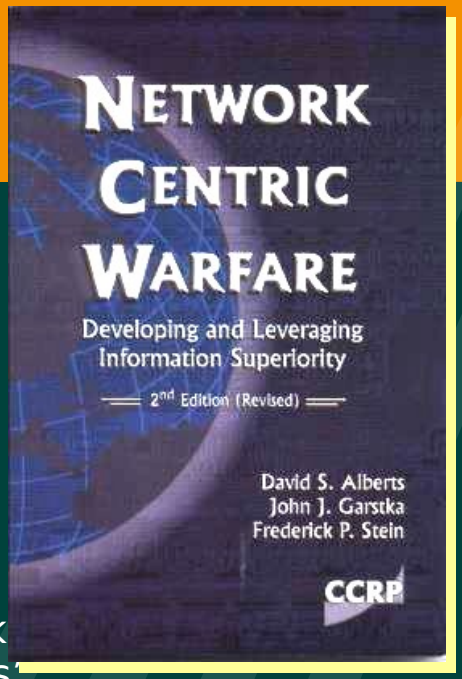
Royal Netherlands Army

Mission Statement C2SC

The C2SC digitizes the battlefield for commanders, in an innovative and controlled manner



Network Centric Warfare



Concept that generates increased operational capabilities by:

- Shared Awareness
- Degree of Self-synchronisation
- Increased speed of command
- Higher speed of operations
- Networking sensors, decision-makers, shooters

Entrance fee:

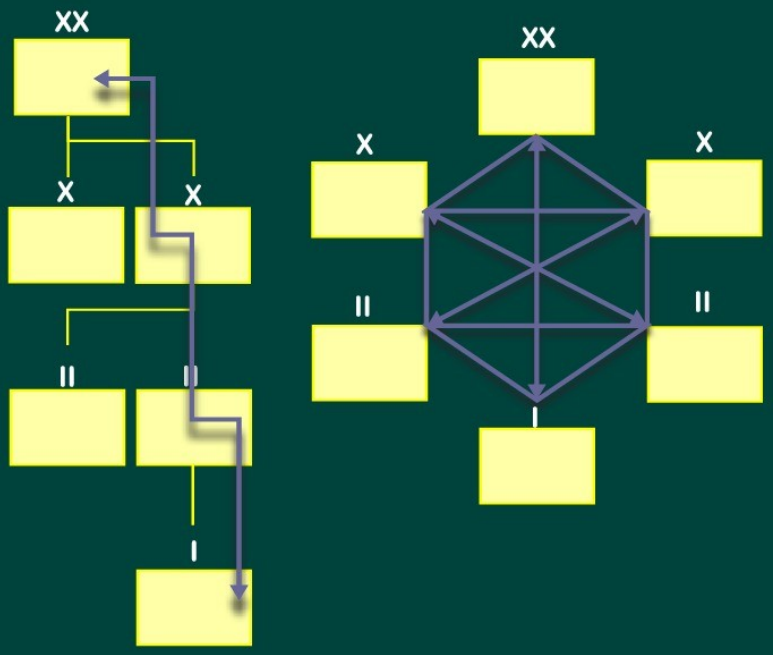
- One integrated network infrastructure: “A network of network
- Boundary-less exchange of information: “A system of systems”

Consequences:

- Get rid of stovepipe systems
- Architectural approach
- Taking system responsibility

“Information dominance leads to Operational success”

Network Centric …



Hierarchical vs. network

Attitude:

- I share all I know asap with my ‘friends’.

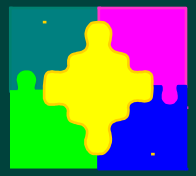
Result:

- Info is available
  - Wherever I am
  - Whatever I do
  - Whenever I want

Effect:

- Pushing information instead of people (changing C2 process)

Organization



C2SC

Policy Arch

Development

Maintenance Testing

Implementation Support

Sup-port

Projects

CIVILIAN EXPERTS FROM INDUSTRY

Relation with mission

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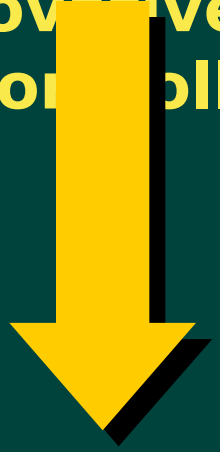
"We are **digitising the battlefield** for **commanders**,
and we are performing this in an **innovative** and
controlled manner"



Evolutionary Development

Architecture Approach

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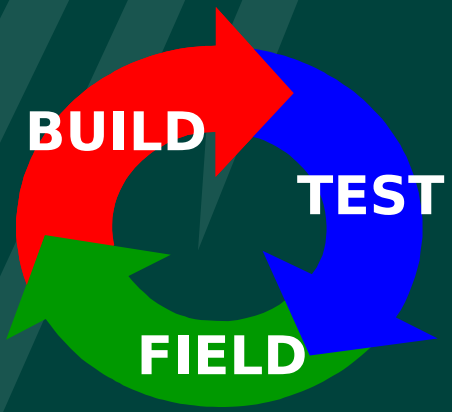
Evolutionary development

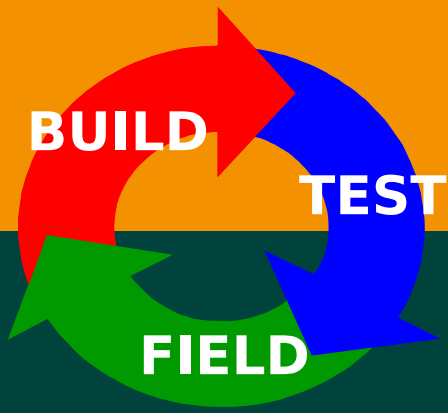
INITIATIVE

Controlled step-by-step approach through:

- Use of C3I Architecture
- Evolutionary development or implementation
- C2SC as smart system integrator of COTS/MOTS modules
- Large efforts on interoperability (MIP, JWID, CE, TACOMS Post 2000)
- Close relations with operational users, R&D institutes, industry



Evolutionary Architecture



Development

Time axis

Architecture-path

Project-path

Experiment

Experiment

Starting point

Architecture

Projects

Users

Users

Users

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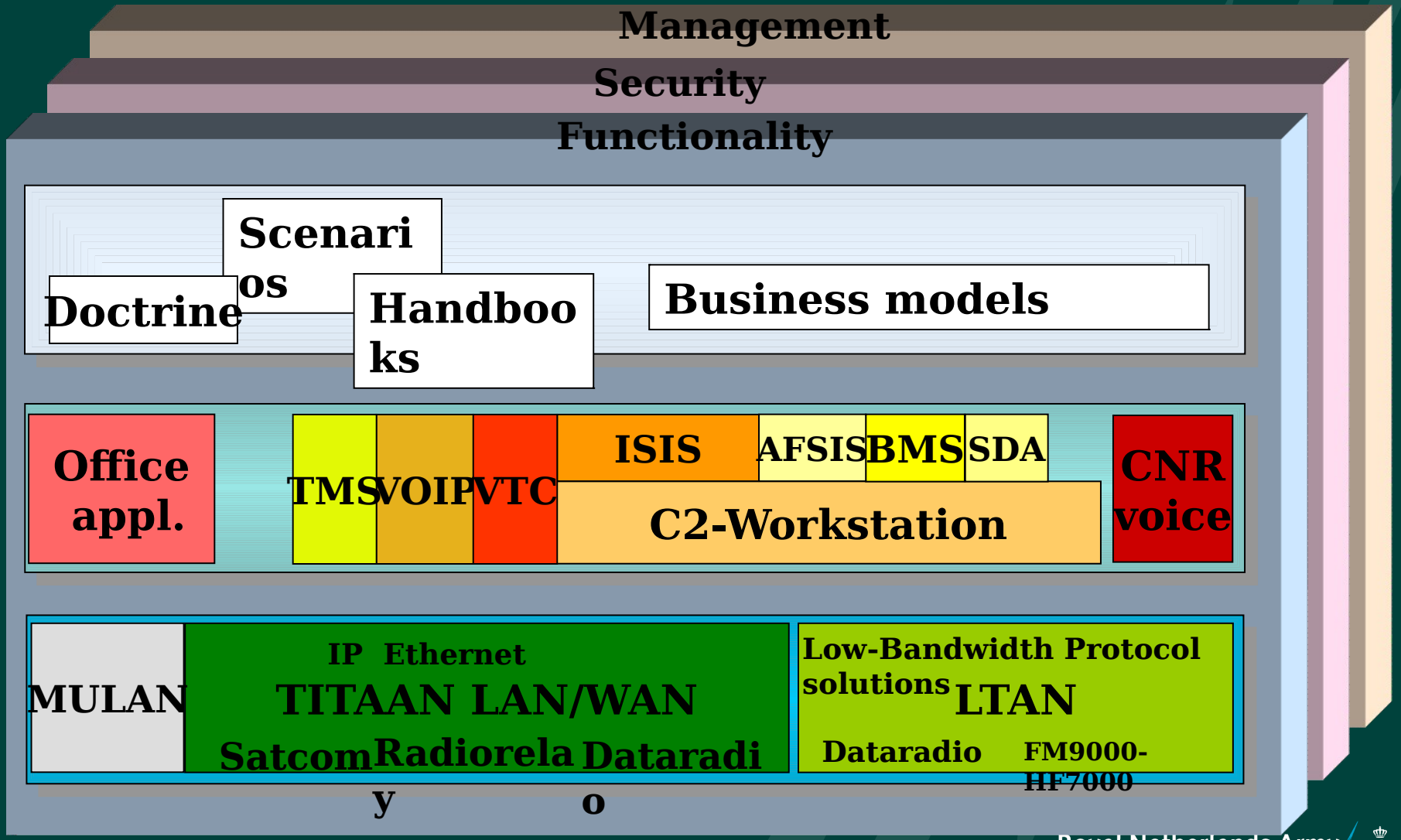
Products under architecture



Achievements C2SC

- ISIS and TMS in operational use by units 1(NL) Division
- Support AMFL with ISIS and TMS
- Support of TFF in Macedonia with ISIS and TMS
- HRFHQ operational (also in Afghanistan) with Titaan
- 11AMB operational tests supported with ISIS and TMS
- BMS is fielded at this moment in SFOR14
- Support of NATCO in their recent HNS ops with ISIS
- Support of the Iraq mission with ISIS and TMS
- Land based C2support enabling “Liberia” with ISIS 3.0

Concluding

- RNLA is committed to NCW concept
- RNLA is committed to interoperability
- RNLA has a unique C3I development institute (C2SC)
- RNLA has adopted:
  - Evolutionairy development
  - Development under Architecture
- RNLA is fielding the first evolutions of
  - An integrated network
  - COP and operational planning systems
- RNLA is looking for partners to face the challenges on the road to enabling Network Centric Warfare

Basic concepts for the Centre of Excellence

- **Stimulate** instead of prescribe
- Not by studying but by **doing**
- Operational process **and** supporting technology
- **Evolutionairy** approach
- Focus on **modern** technology building NCW

Role C2SC in international arena (1)

C2SC contributes to:

MIP
- Chairing the Program Mgmt Group
- Co-chairing SysEng & Arch wg
- Hosted MIP IOT&E in 2003

Combined Endeavor
- Chairing VOIP wg in CE
- Co-chairing Data Transport systems wg
- Present in CE-2004 with TITAAN, VOIP, ISIS, MIP-adaptor, TMS

JWID
- Present in JWID-2004 with ISIS 3.0 (on C2WS framework), BFT application, MIP-adapter
- Play NRF operational scenario with NO

Majiic programme
- Testbed connection with sensorsystem (Sperwer) and C2-system (ISIS 3.0 through MIP-adapter)

Tacoms post 2000
- Principal engineer in IPO
- Testbed for evaluating STANAG proposals against TITAAN

Role C2SC in international arena (2)

- C2SC engaged in GE-NL cooperation (TITAAN for HRFHQ)
- C2SC is executing MOU with BE (BE implementing ISIS)
- C2SC is executing MOU with NO (C2 cooperation)
- C2SC is performing specific C2 exchange of information with:

  United States, Sweden, Croatia, Slovakia, Bulgaria, Romania
- C2SC has hosted visits for incidental C2 exchange by:

  United Kingdom, Ukraïne, Switzerland, NC3O, ..
- C2SC is preparing for international NCW course

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Briefings on 12 and 13. May

- E-learning TITAAN

  demonstration in Dutch tent
- Centric Services for the Tactical Mobile Domain

  demonstratiopn: Battlefield Management System

  briefing building 209 (12.05. 10.00hrs, 13.05. 14.00hrs)
- CISCO Networking Academy

  briefing building 209 (12.05. 11.00hrs, 13.05. 15.00hrs)
- IPv6 today (CISCO)

  briefing building 209 (12.05. 11.30hrs, 13.05. 15.30hrs)

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